KAGAN, M.S.

Computing depreciation of hydraulic structures of soil improvement systems. Gidr.i mel. 5 no.12:43-51 D '53. (MLRA 6:11)
(Hydraulic engineering) (Depreciation)

KAGAN, M.S.

Making large cast iron parts in molds of sand sodium silicate.
Lit. proizv. no.6 12-13 Je '61. (MIRA 14:6)

(Iron founding)
(Sand, Foundry)

KAGAN, M.S.; LIFSHITS, T.M.; MUSATOV, A.L.; SHERONOV, A.A.

Field emission from high-resistance germanium. Fiz. tver. tela 6 no.3:722-727 Mr '64. (MIRA 17:4)

1. Institut radiotekhniki i elektroniki AN SSSR, Moskva.

VOLKOVA, O.Yu., prof.; TASHINSKAYA, A.D., kand.med.nauk; KAGAN, M.S., kand. khimicheskikh nauk

Effect of various concentrations of radon on the peripheral blood in animals. Uch.zap.Pyat.gos.nauch.-issl.bal'n.inst. 3:3-15 '60. (MIRA 15:10)

(RADON--THERAPEUTIC USE) (BLOOD--EXAMINATION)

KAGAN, M.S., kand.khimicheskikh nauk; LEGEN'KAYA, L.M.; KHURTINA, Ye.V.

Determining the integral absorbed radiation dosage for white mice during their irradiation in a radiation chamber. Uch.zap. Pyat.gos.nauch.-issl.bal'n.inst. 3:397-413 '60. (MIRA 15:10)
(RADON) (RADIATION--DOSAGE)

VOLKOVA, O.Yu.; TASHINSKAYA, A.D.; KAGAN, M.S.

Action of radon radiations and the products of its decomposition on hematopoietic processes. Med.rad. no.9:54-63 '61.
(MIRA 15:1)

1. Iz mikrobiologicheskoy laboratorii Gosudarstvennogo bal'neologicheskogo instituta na Kavkazskikh Mineral'nykh Vodakh.
(RADON--PHYSIOLOGICAL EFFECT)
(HEMOPOIETIC SYSTEM--RADIOGRAPHY)

DERYABINA, V.M.; KAGAN, M.S.; LEGEN'KAYA, L.M.; KHURTINA, Ye.V.

Physiological and dosimetric studies of the effect of radon water administered internally on the secretory function of the stomach. Med.rad. no.3:39-45 '62. (MIRA 15:3)

1. Iz eksperimental'nogo otdela (zav. - prof. A.K. Piskegin) i radiologicheskoy laboratorii (zav. - kand.med.nauk M.S. Kagan) Pyatigorskogo nauchno-issledovatel'skogo bal'neologicheskogo instituta.

(RADON) (STOMACH--SECRETIONS)

L 2404-66 EWT(1)/EWT(m)/EPA(w)-2/EWP(t)/EWP(b)/EWA(m)-2 IJP(c) JD/AT

ACCESSION NR: AP5022469 GE/0030/65/011/001/0415/0428

AUTHOR: Kagan, M. S.; Kalashnikov, S. G.; Zhdanova, N. G.

TITLE: Nonlinear electrical effects and recombination of the hot electrons in compensated germanium

SOURCE: Physica status solidi, v. 11, no. 1, 1965, 415-428

TOPIC TAGS: germanium, semiconductor, hot electron effect, recombination impurity center, capture cross section

ABSTRACT: Steady-state and transient current-voltage characteristics of Cu-doped n-type Ge samples with a partially compensated upper ($E_c - 0.26$ ev) Cu level were investigated in a field which was varied from 1 to 10^4 v/cm. In a field greater than ~100 v/cm the current-voltage curves were found to be sublinear. A study was made of the effect of temperature and of the spectrum of the incident light on the steady state and the kinetics of the photocurrent. Negative differential conductivity and coherent low-frequency oscillations were observed at nitrogen temperatures and at high illumination. The nonlinear effects were shown to be due mainly to a decrease of electron

Card 1/2

Card 2/2

L 2404-66

ACCESSION NR: AP5022469

concentration in the conduction band. This was ascribed to the field dependence of a_n, the probability of electron capture by the doubly charged Cu ions. In the strong electric fields the crystals became inhomogeneous due to the formation of strong- and weak-field regions. The possible influence of these inhomogeneities on the nonlinear effects was discussed and the change of d_n in the the strong field was estimated. Orig. art. has: 13 figures and 13 formulas. [CS]

ASSOCIATION: Institute of Radioengineering and Electronics, Academy of Sciences, USSR, Moscow

SUBMITTED: 05Jul65 ENCL: 00 SUB CODE: SS, EM

NO REF SOV: 006 OTHER: 015 ATD PRESS: 4107

Card 2/2

L 23027-66 EWT(l)/EWT(m)/T/EWP(t) IJP(c) JD/AT

ACC NR: AP6009661 SOURCE CODE: UR/0181/66/008/003/0788/0791

AUTHORS: Zhdanova, N. G.; Kagan, M. S.; Kalashnikov, S. G.

ORG: Institute of Radio Engineering and Electronics, AN SSSR, Moscow (Institut radiotekhniki i elektroniki AN SSSR)

TITLE: Instability of current and electric domains in compensated germanium

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 788-791

TOPIC TAGS: germanium, photoeffect, crystal structure, semiconductor impurity, electric current

ABSTRACT: This is a continuation of earlier work (Phys. Stat. Sol. v. 11, 415, 1965) where it was found that under certain conditions copper-doped or gold-doped germanium is subject to intense low-frequency current oscillations. The present article deals with the properties and nature of these oscillations in n-type germanium containing copper with a partially compensated upper level, under definite illumination conditions, at nitrogen temperatures, and in fields

Card 1/3

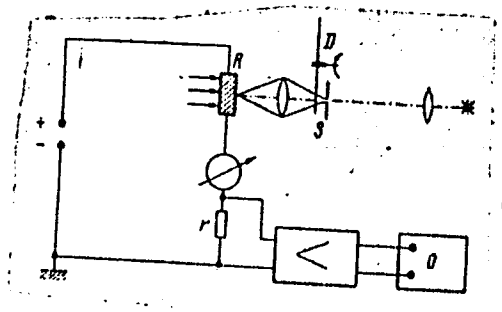


Fig. 1. Diagram of optical probe. R -- sample, r -- load resistance, S -- slit, D -- modulating disc, O -- oscilloscope.

exceeding ~100 v/cm. The measurements were made at 90K. To determine the origin of the oscillations, the time dependence of the resistance distribution over the crystal was measured by means of an optical probe (Fig. 1), whereby a narrow fixed image of an illuminated slit could be focused on different parts of the crystal. The measurements have shown that these oscillations, as in other crystals, is due to the formation and motion of electric domains -- regions with large resistance and strong fields. Unlike observations by others (and in other crystals), in some samples the domains were

L 23027-66
ACC NR: AP6009661 O

observed not in the entire crystal, but only in a part of the crystal. The velocity of the domain increased with increasing illumination intensity. The period of the spontaneous oscillations of the current is determined by the time necessary for the domain to travel from its place of initiation to the anode. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 24Jul65/ ORIG REF: 001/ OTH REF: 009

Card 3/3 LC

KAGAN, M.S., podpolkovnik meditsinskoy sluzhby

Apparatus for determining the nearest point of clear vision. Voen-med. zhur. no.1:88 Ja '56 (MLRA 10:5)
(VISION,
near point of clear vision, appar. for determ)(Rus)

KAGAN, M. S. Guards Lt. Col. Med. Service

"Folding Wooden Panel for Stretchers for Medical Transport Station of an Airfield," Voyenno-Medits. zhur., No.10, Oc. 67-68, 1956

This article deals with a new type of panel folding stretcher to be used for cases of spinal injury.

Translation 1083818

KAGAN, M.S. (Petrozavodsk)

Determining the axis position of the correcting cylinder by means of a cross cylinder. Vest.oft. 69 no.6:29-32 N-D '56. (MLRA 10:3)
(ASTIGMATISM, ther.
use of cross-cylinder)
(OPHTHALMOLOGY, appar. and instruments
cross-cylinder for correction of astigmatism)

KAGAN, M.S.

SOV/112-59-2-2300

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 2, p 4 (USSR)

AUTHOR: Kagan, M. S.

TITLE: Results of Investigation of Eyes of the Personnel Engaged in Aircraft Radar-Landing (Resul'taty issledovaniya sostoyaniya organa zreniya u personala radiolokatsionnoy sistemy posadki samoletov)

PERIODICAL: Gigiyena truda i prof. zabolevaniy . 1957, Nr 6, pp 54-57

ABSTRACT: Bibliographic entry.

Card 1/1

ACCESSION NR: AP4019829 S/0181/64/006/003/0722/0727

AUTHORS: Kagan, M. S.; Lifshits, T. M.; Musatov, A. L.; Sharonov, A. A.

TITLE: Autoelectronic emission from high resistance germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 3, 1964, 722-727

TOPIC TAGS: secondary emission, semiconductor property, EMU 3 electromagnetic amplifier, volt ampere characteristic, semiconductor resistance

ABSTRACT: Studies were made on both n- and p-type germanium at temperatures of 293 and 80K. The germanium was doped with gold and compensated with antimony. The gold concentration was $5 \cdot 10^{14}$ cm^{-3} and the antimony concentration was of the same order, but chosen in such a way that the sample had high resistance at the temperature of liquid nitrogen. Resistivities attained for n-type germanium at 80K were about 10^8 ohm cm, and for p-type 10^6 ohm cm. The volt-ampere characteristics of emission and the distribution of electrons according to energy are shown in Figs. 1 and 2 on the Enclosures. They exhibit no perceptible effect of "heating

Card 1/4

ACCESSION NR: AP4019829

ENCLOSURE: 01

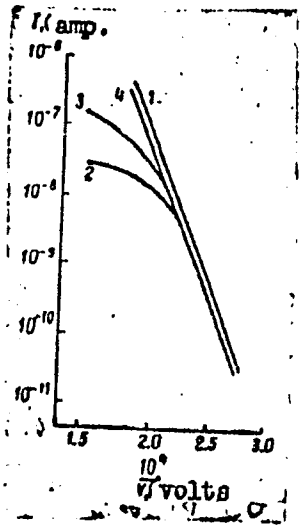


Fig. 1. Volt-ampere characteristics of autoelectron emission from germanium.

Temperature: 1 - 293K; 2-4 - 80K;
1,2 - nonirradiated samples;
3 - weakly irradiated sample;
4 - strongly irradiated sample.

Card 3/4

ACCESSION NR: AP4019829

ENCLOSURE: 02

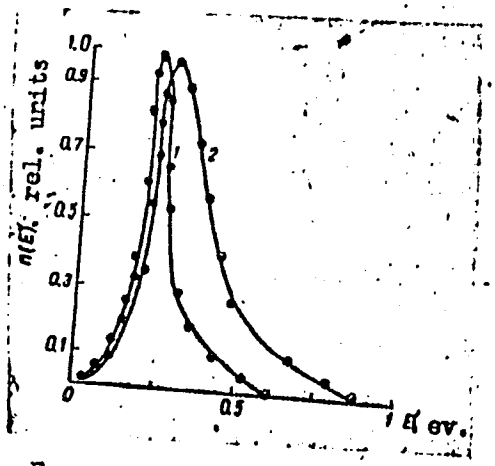
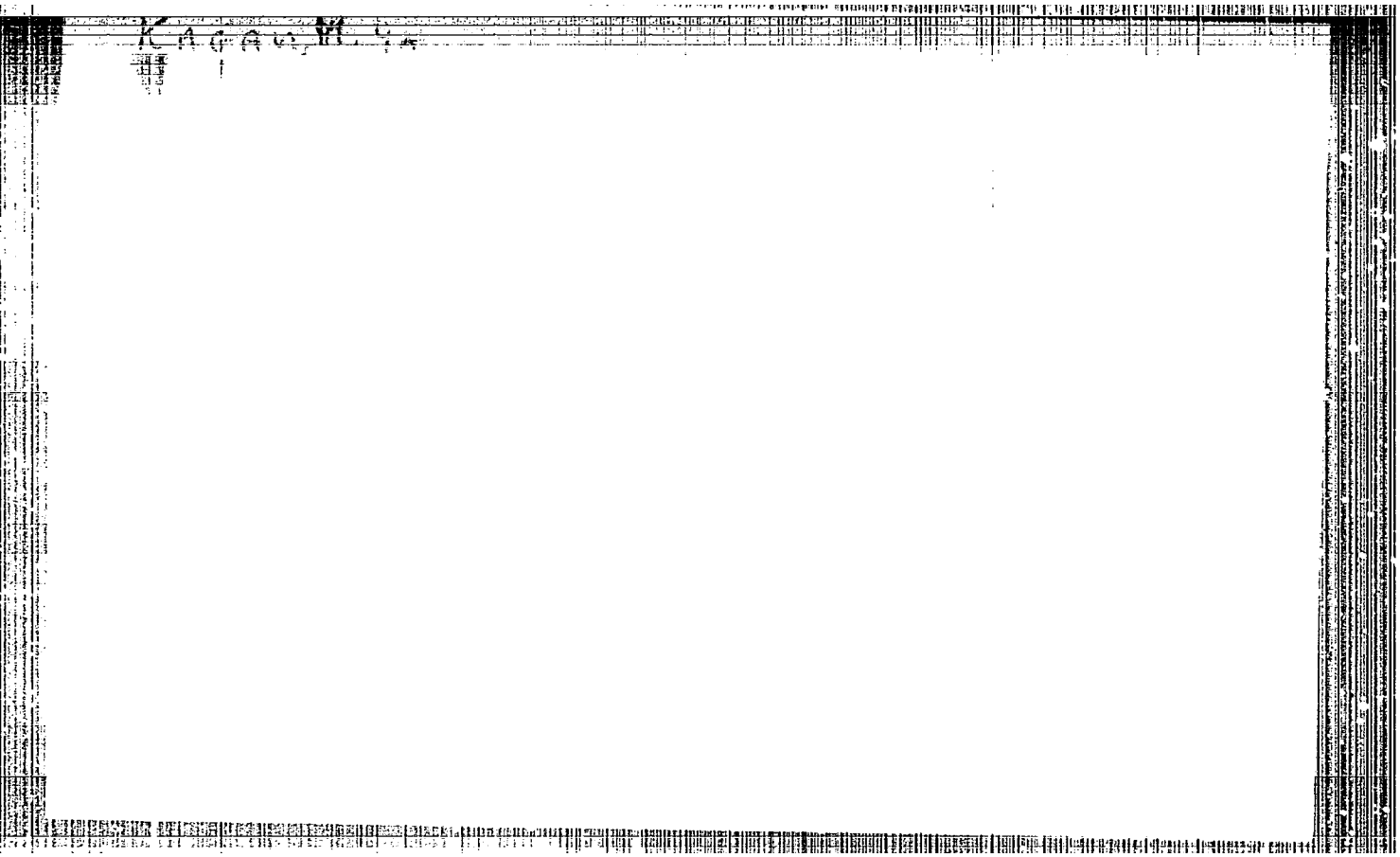


Fig. 2. Energy spectrum of emitted electrons
I: 1 - $2 \cdot 10^{-9}$ amps; 2 - $7 \cdot 10^{-9}$ amps.

Card 4/4



APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619910014-0"

5 (3)
AUTHORS: Mel'nikov, N. N., Shvetsova-Shilovskaya, K. D., Kagan, M. Ya., Mil'shteyn, I. M.

SOV/79-29-5-43/75

TITLE: From the Field of Organic Insectofungicides (Iz oblasti organicheskikh insektofungitsidov). XLII. Synthesis of Some Mixed Esters of Dithio-phosphoric Acid (XLII. Sintez nekotorykh smeshannykh efirov ditiofosfornoy kisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 5, pp 1612-1614 (USSR)

ABSTRACT: In order to explain the dependence between the insecticidal effect and the constitution of the compound, mixed (alkyl-aryl-) esters with the following general formulae are to be prepared: $(RO)_2PSS(CH_2)_nAr$ (I); $(RO)_2PSS(CH_2)_nXAr$ (X = CS), (II); $(RO)_2PSS(CH_2)_nNR'_2$ (III), and $(RO)_2PSO(CH_2)_nAr$. The present paper deals with the synthesis of the esters I and II. They were obtained by reaction between salts of dialkyl-phosphoric acids and the halogen derivatives of alkyl-substituted aryls. In some cases the reaction proceeded very slowly and the esters were obtained in low yield only. The reaction of the salts of dimethyl-thiophosphoric acid was particularly bad. The

Card 1/2

From the Field of Organic Insectofungicides. XLII. Synthesis of Some Mixed Esters of Dithio-phosphoric Acid

SOV/79-29-5-43/75

resulting methyl esters presumably act as alkylating (methylating) agents owing to the considerable mobility of the methyl radical. Nearly all compounds presented in a table with their physical data have hitherto not been described in publications, with the exception of the esters with p-chloro-benzyl radical which are patented in the Federal Republic of Germany (Ref 11). The authors prepared the compounds according to I and II with R = CH_3, C_2H_5, C_3H_7, iso-C_3H_7, C_4H_9, Ar = C_6H_5, C_6H_4Cl, $C_6H_4NO_2$, and n = 1,2 and 3. The experimental part describes the production of O,O-dialkyl-S-benzyl-dithiophosphates and O,O-dialkyl-S-2-phenoxy-ethyl-dithiophosphates. There are 1 table and 12 references, 6 of which are Soviet.

ASSOCIATION: Nauchnyy institut po udobreniyam i insektofungitsidam (Scientific Institute for Fertilizers and Insectofungicides)

SUBMITTED: April 12, 1958

Card 2/2

5.1320,5.3630

77379
SOV/79-30-1-40/78

AUTHORS: Shvetsova-Shilovskaya, K. D., Mel'nikov, N. N., Kagan, M. Ya., Glushenkov, V. A.

TITLE: Concerning Organic Pesticides. LI. Synthesis of Some O,O-Dialkyl Arylmercaptomethyl Dithiophosphates

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 193-194 (USSR)

ABSTRACT: A series of O,O-dialkyl arylmercaptomethyl dithiophosphates (the majority of which the authors were the first to describe) were obtained in the reaction

$$(RO)_2PSSMe + ClCH_2SAr \longrightarrow (RO)_2PSSCH_2SAr + MeCl$$

Benzene, alcohol, or other solvents having a common radical with the dialkyl dithiophosphate molecule were used in this reaction. Biological tests were made by P. V. Popov and N. S. Ukrainets and showed that O,O-dimethyl- and O,O-diethyl arylmercaptomethyl dithiophosphate (see Table) were the most effective killers of

Card 1/3

Concerning Organic Pesticides. LI. Synthesis of Some O,O-Dialkyl Arylmercaptomethyl Dithiophosphates

77379
SOV/79-30-1-40/78

Constants of O,O-dialkyl-arylmercaptomethyldithiophosphates

Formula	Yield (in %)	bp (pressure in mm)	d_4^{20}	n_D^{20}
$C_6H_5SCH_2SSP(OC_2H_5)_2$	36	128° (0.03)	1.2044	1.5909
$C_6H_5SCH_2SSP(OC_3H_7)_2$	68	139—142 (0.08)	1.1670	1.5726
$C_6H_5SCH_2SSP(OC_3H_{7\text{-}iso})_2$	73	133 (0.18)	1.1691	1.5720
$C_6H_5SCH_2SSP(OC_4H_9)_2$	63	175 (0.15)	1.1227	1.5583
$C_6H_5SCH_2SSP(OC_4H_{9\text{-}iso})_2$	49	151—152 (0.18)	1.1214	1.5673
$4\text{-}ClC_6H_4SCH_2SSP(C_2H_5)_2$	63	143 (0.06)	1.2703	1.5932
$4\text{-}ClC_6H_4SCH_2SSP(C_3H_7)_2$	63	180—182 (0.25)	1.2269	1.5803
$4\text{-}ClC_6H_4SCH_2SSP(C_3H_{7\text{-}iso})_2$	75	cannot be distilled	1.2259	1.5775
$4\text{-}ClC_6H_4SCH_2SSP(C_4H_9)_2$	65		1.1721	1.5685

Card 2/3

Concerning Organic Pesticides. LI. Synthesis of Some O,O-Dialkyl Arylmercaptomethyl Dithiophosphates

77379
SOV /79-30-1-40/78

barn weevill among the compounds listed. The effectiveness dropped sharply with the increasing aliphatic ester radical size. There is 1 table; and 4 references, 2 U.S., 1 East German, 1 Soviet. The U.S. references are: H. T. Reinolds, T. R. Fukuto, R. L. Metcalf, R. B. March, J. Econ. Entomol., 50, 527 (1957); U.S. Pat. 2793294 (Ch. A. 51, 14196 (1957)).

ASSOCIATION: Scientific Institute of Fertilizers and Pest[illegible]s (Nauchnyy institut po udobreniyam i insektof[illegible]usidam)

SUBMITTED: January 5, 1959

Card 3/3

KAGAN M. YA.

5.3630

77382
SOV/79-30-1-43/78

AUTHORS: Mel'nikov, N. N., Shvetsova-Shilovskaya, K. D., Kagan, M. Ya.

TITLE: Concerning Organic Pesticides. LIV. A New Method of Preparation of Trialkyl Dithiophosphates and Tetraalkyl Dithiopyrophosphates

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 200-203 (USSR)

ABSTRACT: The reaction between bis(dialkoxythiophosphoryl) disulfides and dialkyl phosphites, in the presence of triethylamine, proceeds with the formation of corresponding esters of dithiophosphoric acid.

$$[(RO)_2PS]_2S_2 + (R'O)_2POHN(C_2H_5)_3 \longrightarrow 2\ (RO)_2PSSR' + (C_2H_5)_3NHPO_2^-$$

The obtained produces are mostly new compounds (see Table 1). The reaction between bis(dialkoxythiophosphoryl) disulfides and trialkyl phosphites proceeds

Card 1/4

Concerning Organic Pesticides. LIV. A New Method of Preparation of Trialkyl Dithiophosphates and Tetraalkyl Dithiopyrophosphates

77382, SOV/79-30-1-43/78

Table 1

Formula	Yield (%)	b.p. (pressure in mm)	d_4^{20}	n_D^{20}
$(CH_3O)_2P(S)SCH_3$*	70	51—52° (0.2)	1.2338	1.5200
$(C_2H_5O)_2P(S)SCH_3$	88	63.5—64 (0.08)	1.1951	1.5100
$(C_3H_7O)_2P(S)SCH_3$	53	68—70 (0.1)	1.0806	1.5008
$(iso\text{-}C_3H_7O)_2P(S)SCH_3$**	90	60—60.5 (0.07)	1.0736	1.4950
$(C_4H_9O)_2P(S)SCH_3$	63	89—90 (0.08)	1.0540	1.4960
$(iso\text{-}C_4H_9O)_2P(S)SCH_3$	78	75—76 (0.07)	1.0483	1.4930
$(CH_3O)_2P(S)SC_2H_5$	32	48—50 (0.08)	1.1641	1.4958
$(C_2H_5O)_2P(S)SC_2H_5$***	61	57—58 (0.08)	1.1111	1.5050
$(C_3H_7O)_2P(S)SC_2H_5$	57	73.5—75 (0.08)	1.0823	1.4968
$(iso\text{-}C_3H_7O)_2P(S)SC_2H_5$	37	61—62 (0.08)	1.0757	1.4910

Card 2/4

Concerning Organic Pesticides. LIV. A New Method of Preparation of Trialkyl Dithiophosphates and Tetraalkyl Dithiopyrophosphates

77382
SOV/79-30-1-43/78

with formation of trialkyl dithiophosphates, as well as unsymmetrical tetralkyl dithiopyrophosphates. The latter are not described in the literature.

$$[(RO)_2PS]_2S_2 + (R'O)_3P \longrightarrow (RO)_2PSSR' + (RO)_2PSSPO(OR')_2$$

The above products are obtained, in good yields, accompanied by a small amounts of side products. There are 2 tables; and 10 references, 7 Soviet, 1 French, 1 Japanese, 1 U.S. The U.S. reference is: G. R. Norman, N. M. Lesuer, T. W. Mastin, J. Am. Chem. Soc., 74, 161 (1952).

ASSOCIATION: Scientific Institute of Fertilizers and Pesticides (Nauchnyy institut po udobreniyam i insektofungitsidam)

SUBMITTED: January 19, 1959

Card 3/4

Concerning Organic Pesticides. LIV. 77382, SOV/79-30-1-43/78

Table 2

Formula	Yield (in %)	bp (pressure in mm)	d_4^{20}	n_D^{20}
$(CH_3O)_2P(S)SC_2H_5$	quantitative	58—59 (0.1)	1.1795	1.5080
$(CH_3O)_2P(S)SP(O)(OC_2H_5)_2$	59	106—106.5 (0.1)	1.2443	1.4915
$(C_2H_5O)_2P(S)SC_2H_5$	84	69—71 (0.075)	1.1160	1.5020
$(C_2H_5O)_2P(S)SP(O)(OC_2H_5)_2$	83	114—115 (0.08)	1.2054	1.5008
$(C_3H_7O)_2P(S)SC_2H_5$	52	72—74 (0.07)	1.0638	1.4945
$(C_3H_7O)_2P(S)SP(O)(OC_2H_5)_2$	76	112—119 (0.07)	1.1394	1.4940
$(iso\text{-}C_3H_7O)_2P(S)SC_2H_5$	62	59—60 (0.17)	1.0720	1.4900
$(iso\text{-}C_3H_7O)_2P(S)SP(O)OC_2H_5)_2$	87	117—118 (0.18)	1.1435	1.4915
$(C_4H_9O)_2P(S)SC_2H_5$	70	86—88 (0.08)	1.0400	1.4923
$(C_4H_9O)_2P(S)SP(O)(OC_2H_5)_2$	68	123—124 (0.07)	1.1000	1.4908
$(C_2H_5O)_2P(S)SC_3H_7$	70	72.5—73 (0.08)	1.0901	1.4990
$(C_2H_5O)_2P(S)SP(O)(OC_3H_7)_2$	38	123 (0.1)	1.1477	1.4872
$(C_3H_7O)_2P(S)SC_3H_7$	65	74—76 (0.11)	1.0349	1.4860
$(C_3H_7O)_2P(S)SP(O)(OC_3H_7)_2$	60	125—127 (0.08)	1.0917	1.4865
$(iso\text{-}C_3H_7O)_2P(S)SC_3H_7$	83	67.5—68.5 (0.075)	1.0459	1.4848
$(iso\text{-}C_3H_7O)_2P(S)SP(O)(OC_3H_7)_2$	72	126.5—127 (0.15)	1.1168	1.4905

Card 4/4

MEL'NIKOV, N.N.; SHVETSOVA-SHILOVSKAYA, K.D.; KAGAN, M.Ya.

Organic insectofungicides. Part 61: Interaction between bis (dialkoxythiophosphono) disulfides and triaryl- and diarylphosphites. Zhur.ob.khim. 30 no.7:2319-2322 Jl '60. (MIRA 13:7)

1. Nauchnyy institut po udobreniyam i insektofungitsidam, Moskva.
(Phosphites) (Sulfides)

MEL'NIKOV, N.N.; SHVETSOVA, K.D.; GRAPOV, A.F.; MIL'SHTEYN, I.M.; KAGAN, M.Ya.

Investigation of new chemicals for the protection of plants. [Trudy] NIUIF no.164:27-28 '59. (MIRA 15:5)
(Insecticides)

KAGAN, M. Ye.

28(4) SOV/32-25-7-42/50

AUTHORS: Mikhaylov, L. A., Komissarov, F. I., Miroshnikov, V. A., Gruns, Ya. E., Kagan, M. Ye., Vayl', Ye. I., Kosyura, A. S., Sklyarov, A. A.

TITLE: News in Brief (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 886-897 (USSR)

ABSTRACT: L. A. Mikhaylov, F. I. Komissarov, V. A. Miroshnikov (workers in a Plant Laboratory) describe a device (Fig) for sampling weld wire. The sampling was carried out by means of a spur-gear cutter; about 70 g can be obtained within 4-5 minutes. Ya. E. Gruns and M. Ye. Kagan (Institut geofiziki UFAN SSSR) (Institute of Geophysics of the UFAN USSR) describe a device working on the principle of semiconductors for measuring the specific electric resistance of water in hydrochemical prospecting. The functioning of the device is based on the measurement of the resistance between two electrodes which are dipped into the water to be examined. The device has an automatic generator with triodes P1G with an amplifyer and triode P2B, and triodes P2B for the bridge scheme. Its weight amounts to 2.2 kg and its dimensions are 233 x 100 x 170 mm. It is charged by two batteries 49-5AMTsG-0.25.

Card 1/2

Ye. I. Vayl', A. S. Kosyura, A. A. Sklyarov (NII Ukr. VODGEO) report on a modification of the photometer FM-56 (Fig): the stand is displaced by a plexiglass stand. The latter has holes which correspond to the cuvettes used and thus measuring errors can be avoided because of insufficiently covered holes. There are 2 figures.

Card 2/2

GREZIN, V. M.; KAGAN, M. Ye.

Resistance of AG-4C glass plastics to prolonged loading under normal climatic conditions. Plast. massy no. 5: 38-43 '64. (MIRA 17:5)

GREZIN, V.M.; KAGAN, M.Ye.

Static bending test of the AG-4S glass-reinforced plastic.
Standartizatsiia 28 no.2:38-40 F '64. (MIRA 17:3)

KAGAN, M.Ye., doktor tekhnicheskikh nauk.

Prefabricated wooden grain warehouses. Stroi.prom. 25 no.7:22-23 Jl '47. (MLRA 9:1)

(Granaries)

KAGAN, M. Ye.

34044 Kleyenyye svai. Sbornik trudov (Nauch-issled. in-t po stroit-vu), 2, 1949, s. 5-12

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, 1949

KARISEN, M. Ye.

KARISEN, Genrikh Georgiyevich, 1894- redaktor, professor, doktor tekhnicheskikh nauk; BOL'SHAKOV, V.V., dotsent, kandidat tekhnicheskikh nauk; KARISEN, M.Ye., professor, doktor tekhnicheskikh nauk; SVENTSITSKIY, G.V., dotsent, kandidat tekhnicheskikh nauk.

[Wooden structures] Dereviannye konstruktsii. Izd.2., perer. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1952. 757 p. (MLRA 6:10)
(Building, Wooden) (Lumber)

KARAN, M.Ye.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Karlsen, G.G. Bol'shakov, V.V. Karan, M.Ye. Sventsitskiy, G.V.	"Wooden Structures" (textbook, 2d edition)	Moscow Construction Engineering Institute imeni V.V. Kuybyshev

SO: W-30604, 7 July 1954

KAGAN, M.Ye., professor, doktor tekhnicheskikh nauk; SOKOLOVSKIY, B.S., kandidat tekhnicheskikh nauk; YAVLENSKIY, S.D., inzhener.

Application of cemented piles and sheet piling in building hydrotechnical structures. Gidr.stroi. 23 no.3:26-29 '54. (MLRA 7:6)
(Pile driving)

KAGAN, MOUSEY YEFIMOVICH

N/5
661.4
.K13

Kleyemyye Svai I Shpunt (Cemented Piers and Sheet Piling, By) M. Ye. Kagan, B. S. Sokolovskiy, i S. D. Yavlenskiy. Moskva, Izd-Vo Rechnoy Transport, 1955.

126 P. Illus., Diagrs., Tables.

KAGAN, M.Ye., prof., doktor tekhn.nauk

Physical and mechanical characteristics of wooden piles after prolonged submersion in the Caspian Sea. Sbor.trud. MISI no.13:23-40 '57
(Piling (Civil engineering)) (Wood--Testing) (MIRA 11:8)

KAGAN, M.Ye., prof., doktor tekhn.nauk; SLITSKOUKHOV, Yu.V., kand.tekhn.nauk

Investigating glued pile models for frost resistance. Sbor. trud. MISI no.13:170-180 '58. (MIRA 11:8)
(Piling (Civil engineering)) (Wood--Testing)

GRUNS, Ya.E.; KAGAN, M.Yo.

Transistorized device for determining the electrical resistivity of water; resistivity meter. Trudy Gor.-geol. inst. UFAN SSSR no.34:95-100 '58. (MIRA 14:10)
(Water, Underground--Electric properties)
(Electric prospecting)

KAGAN, M.Ye. (Moskva)

Nonlinearly distributed pressure on bulkheads. Stroi. mekh. i rasch. soor. 2 no.6:35-40 '60. (MIRA 13:12)
(Earth pressure) (Retaining walls)

KARLSEN, G.G., doktor tekhn.nauk, prof.; BOL'SHAKOV, V.V., doktor tekhn.nauk, prof.; KAGAN, M.Ye., doktor tekhn.nauk, prof.; SVENTSITSKIY, G.V., kand.tekhn.nauk, dotsent; ALEKSANDROVSKIY, K.V., dotsent; BOCHKAREV, I.V., kand.tekhn.nauk, dotsent [deceased]; FOLOMIN, A.I., doktor tekhn.nauk; Prinimali uchastiye: KOLOMNIN, G.P., inzh.; SILIN, V.N., dotsent, kand.tekhn.nauk; PISCHIKOV, V.G., kand.tekhn.nauk, dotsent, nauchnyy red.; IVANKOV, P.T., dotsent, red.; BORODINA, I.S., red. izd-va; RUDAKOVA, N.I., tekhn.red.

[Wooden structures] Dereviannye konstruktsii. Izd.3., perer. i dop. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 642 p. (MIRA 15:2)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Karlsen).

(Building, Wooden)

KAGAN, M.Ye., doktor tekhn.nauk, prof.; BUDANOV, V.D., inzh.

Durability of polyvinyl chloride linoleums according to results of tests for rapid aging and actual observations. Stroi. mat. 9 no.2: 33-34 F '63. (MIRA 16:2)

(Ethylene) (Linoleum--Testing)

ACCESSION NR: AP4035105 S/0191/64/000/005/0038/0043

AUTHOR: Grezin, V. M.; Kagan, M. Ye.

TITLE: Resistance of fiberglass AG-4S to prolonged stress under normal climatic conditions.

SOURCE: Plasticheskiye massy*, no. 5, 1964, 38-43

TOPIC TAGS: fiberglass, stress resistance, aging, compression strength, tensile strength, flexural strength, compression coefficient, tensile coefficient, flex coefficient, breakdown stress

ABSTRACT: The compression, tensile and flexural strengths of fiberglass AG-4S on prolonged stress at 20 ± 1C and 70 ± 5% humidity, and the coefficients of prolonged resistance to these stresses were determined after selecting the form and dimension of the test samples. Compression strength was determined according to GOST 4651-49 and GOST 6336-52; tensile strength of 2-3 mm thick bars was tested on apparatus UM-2 according to GOST 4649-55, and flex strength of 10 or 15x200 mm strips was determined according to GOST 4648-56 and OMTU 431-57. The results of prolonged compression, tension or flex at 90, 80, 70, 60 and 50% of the breakdown stresses

Card 1/3

ACCESSION NR: AP4035105

are summarized in the figure. From these the coefficients of long term resistances were determined: for compression, 0.72, tensile strength 0.62 and flex 0.65. Orig. art. has: 7 figures and 4 tables.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 01

SUB CODE: MT NO REF SOV: 003 OTHER: 000

Card 2/3

ACCESSION NR: AP4035105

ENCLOSURE: 01

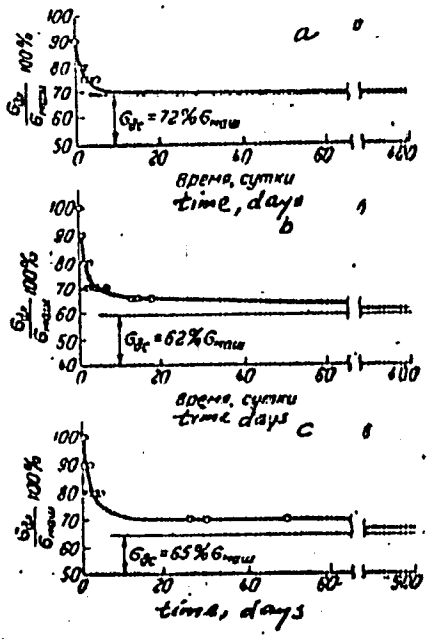


Fig. 1. Long term resistance curves:

a--compression
b--tensile stress
c--static flex

$\sigma_{ac} = \sigma_{long\ term}$

$\sigma_{max} = \sigma_{machine}$

Card 3/3

KAGAN, M.Ye., doktor tekhn. nauk; BUDANOV, V.D., inzh.

Glass reinforced plastics fiber increase the service life of reinforced concrete cooling towers. Prom. stroi. 42 no.12: 46-48 D '64. (MIRA 18:3)

KAGAN, M. YU.

Chem Abs V48
1-25-54
Nutrition

2

The influence of the composition of food on the regenerative process of skeletal musculature of mice. M. Yu. Kagan (I. P. Pavlov 1st Med. Inst., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 91, 683-6(1953).—Tests on tissue regeneration were made on mice kept on full-valued or variously deficient diets. Protein deficiency leads to the most profound deterioration of restoration function and slow healing. A similar retardation of healing is observed in animals with insufficient supply of full-valued diet. The histology of the new tissue is altered in comparison with normal; the differences are given in detail. O. M. K.

Proteins in nutrition. K. S. Shah. *Antiseptic* (Madras) 50, 655-67(1953).—A review with 64 references.
Theresa McKee

KAGAN, M.Yu., kandidat ekonomicheskikh nauk.

Growth of the textile industry in the Polish People's Republic. Tekst. prom. 16 no.8:64-66 Ag '56. (MLRA 9:10)

(Poland--Textile industry)

KAGAN, M.Yu.

Development of forestry in Polish People's Republic. Biul.tekh.-ekon. inform. no.2:78-79 '58. (MIRA 11:4)
(Poland--Forests and forestry)

KAGAN, M.Yu.

Coal mining industry in Poland in 1956-1960. Biul.tekh.-ekon. inform. no.6:82-84 '58. (MIRA 11:8)
(Poland--Coal mines and mining)

KAGAN, M.Yu.

Ferrous metallurgy in Poland. Biul.tekh.-ekon.inform. no.7:83-85 '58. (MIRA 11:9)
(Poland--Steel--Metallurgy) (Poland--Iron--Metallurgy)

KAGAN, M.Yu.

Chemical industry in Poland. Biul. tekhn.-ekon. inform.
no.8:82-84 '58. (MIRA 11:10)
(Poland--Chemical industries)

KAGAN, M.Yu.

Food industry in Poland during the second five-year plan. Biul. tekh.-ekon.inform. no.1:78-81 '59. (MIRA 12:2)
(Poland--Food industry)

TOKAR', M.I., inzh.; KAGAN, M.Yu.

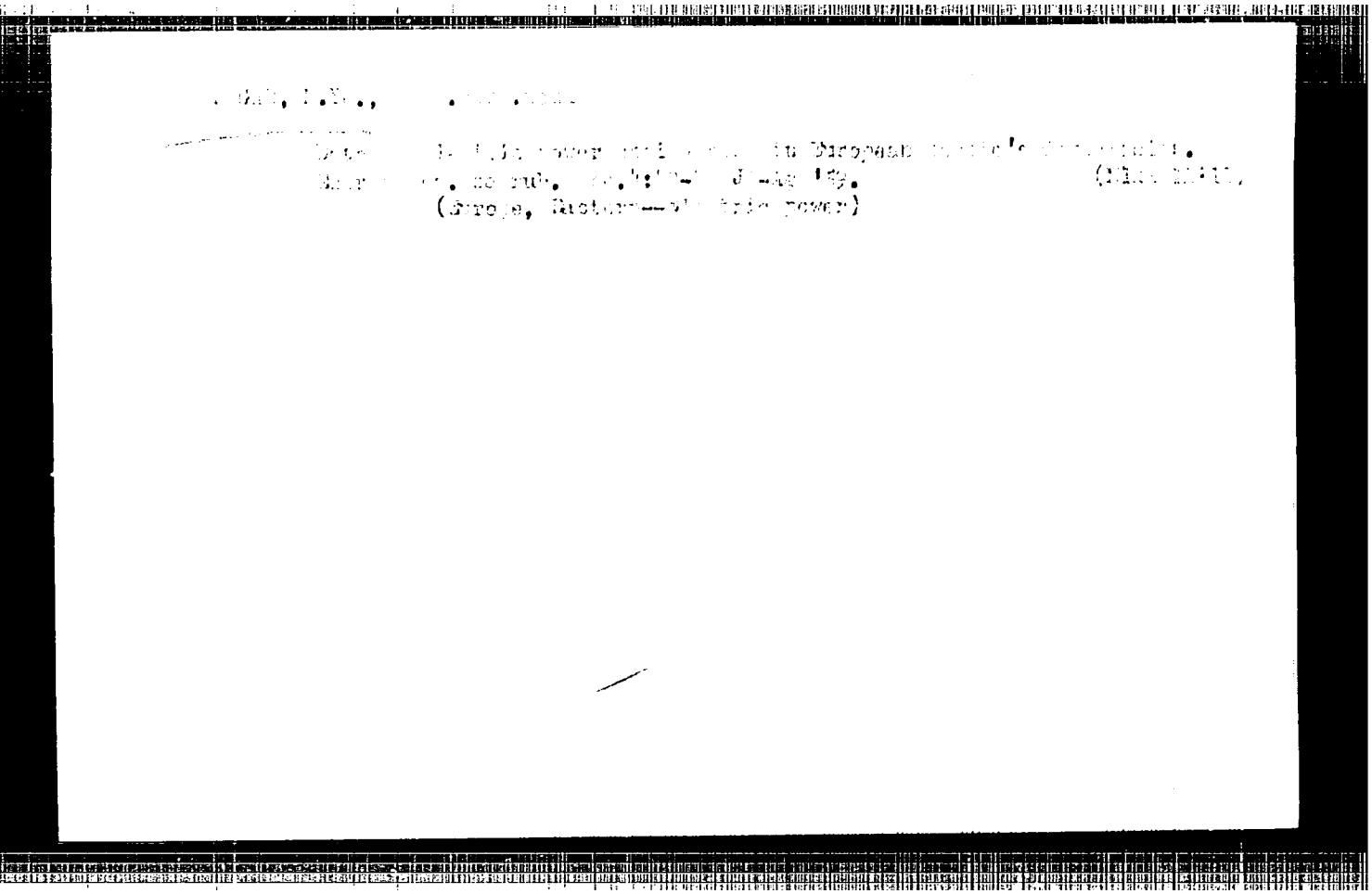
Construction of the Lom[illegible] Hydroelectric Center. Energ. stroi. za rub. no.2:43-[illegible] '59. (MIRA 14:2)

1. Moskovskiy filial [illegible] "Orgenergostroy." (Washington (State)--Hydroelectric power stations)

KAGAN, M.Yu.

Petroleum industry in Poland. Biul.tekh.-ekon.inform. no.2:86-87 '59. (MIRA 12:3)

(Poland--Petroleum industry)



KAGAN, M.Yu.

Present status of electric-power engineering in Poland and the outlook for its development. Biul. tekh.-ekon. inform. no.10:81-83 '59. (MIRA 13:3)

(Poland--Electric power plants)

KAGAN, M.Yu.

Development of electric power engineering in Rumania.
Biul.tekh.-ekon.inform. no.7:77-79 '60.
(MIRA 13:7)

(Rumania--Electric power production)

KAGAN, M.Yu., kand.ekonomicheskikh nauk

Survey of electric power resources of the Hungarian People's Republic.
Energokhoz. za rub. no.5:1-5 S-O '60. (MIRA 13:10)
(Hungary--Electric power)

KAGAN, M.Yu.

Development of electric power production in Bulgaria. Biul.tekh.-ekon.inform. no.11:76-79 '60. (MIRA 13:11)
(Bulgaria--Electric power production)

K...., . ..

Kagan, M. . and Rozenberg, L. I.--"Characteristics of contagious forms of syphilis from data of the Syphilis Department of the Gor'kovskiy Venereal Disease Institute after 1945," Nauch. zapiski Gor'k. in-ta dermatologii i venerologii i Kafedry kozhno-verenich boleznay im Kirova, Issue 12, 1948, p. 36-41

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

Kagan, [illegible]

Kagan, [illegible] Z.--"Penicillin in syphilis cure," Nauch. zapiski Gor'k. in-ta dermatologii i venerologii i Kafedry kozhno-venerich. boleznay GGMI im Kirova, Issue 12, 1948, p. 201-12

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

EXCERPTA MEDICA Sec 13 Vol 13/5 Dermatology May 59

1341. PENTABISMOL IN THE TREATMENT OF SYPHILIS (Russian text) - Batunin M. P., Kagan M. Z., Moiseeva I. V., Remizova E. N. and Remizov D. N. - NAUCH. ZAP. GORK. INST. DERM. I VENER. KAF. KOZHNO-VENER. BOLEZ. GGMI 1956, 17 (208-214)

Pentabismol, a Soviet water-soluble bismuth preparation, was tried out on 33 patients with primary or secondary syphilis. The preparation was given until the disappearance of clinical manifestations of syphilis, afterwards it was combined with novarsenobenzol. The spirochaetae disappeared from the lesions within 2 to 6 days after the administration of 2 to 6 ml. pentabismol, and secondary eruptions subsided after 4 to 7 ml. The preparation acted favourably on the serological reactions and did not adversely affect the detoxicating liver function. It was well tolerated by the patients, did not produce serious complications and proved to be highly effective in early active and recurring forms of syphilis.

(S)

BATUNIN, M.P., prof., zasluzhennyy deyatel' nauki; KAGAN, M.Z., starshiy nauchnyy sotrudnik; MIKHAYLOV, K.A., dotsent; NOSYREVA, N.N., nauchnyy sotrudnik; KHIZHIN, V.Yu., nauchnyy sotrudnik

Observations on the treatment of syphilitic patients with bicillin I. Vest.derm.i ven. 33 no.5:50-54 S-O '59. (MIRA 13:2)

1. Iz Gor'kovskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta i kafedry kozhno-venericheskikh bolezney Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M. Kirova (direktor instituta i zaveduyushchiy kafedroy - zasluzennyy deyatel' nauki prof. M.P. Batunin).
(SYPHILIS ther.)
(PENICILLIN ther.)

Kagan, N.B.

137-1958-3-4632

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 24 (USSR)

AUTHORS: Brudnyy, B. P., Kagan, N. B., Fel'dman, I. A.

TITLE: Automation of Electrical Induction Furnaces (Avtomatizatsiya induktsionnykh elektricheskikh pechey)

PERIODICAL: V sb.: Raboty M-va elektrotekhn. prom-sti SSSR po mekhaniz. i avtomatiz. nar. kh-va. Vol 1. Moscow, 1956, pp 155-158

ABSTRACT: At the present time induction-type smelting furnaces are operated manually. Attempts made in 1947 to control automatically the voltage of the generator which supplied current to the furnace were not successful and were, therefore, abandoned in 1951. The basic parameter, requiring automatic regulation in induction furnaces, is cos φ . Complete automatization of the electrical regimen requires automatic control of the power factor (PF), the voltage, and the generator current. In 1955, a special bureau of the "Elektropech'" ("Electrofurnace") trust began work on the development of a PF (cos φ) regulator for an induction furnace. The following design was developed: A special gage measures the PF of the apparatus and transmits a control impulse to a device which adds or partially removes

Card 1/2

L 27544-66 EWT(1) IJP(c) AT

ACC NR: AP6007506 SOURCE CODE: UR/0109/66/011/002/0287/0290

AUTHOR: Rozenfel'd, L. B.; Kagan, N. B.; Kushnir, Yu. M.

ORG: none

TITLE: Investigation of the energy spectra of ion-electron emission in an emission-type electron microscope

SOURCE: Radiotekhnika i elektronika, v. 11, no. 2, 1966, 287-290

TOPIC TAGS: electron microscope, energy spectrum, ion bombardment

ABSTRACT: The results are presented of an experimental investigation of the energy spectra of secondary electrons arising from the bombardment of specimens by a positive-ion beam, in an electron emission microscope. Energy spectra of W, Mo, Ta, Ti, Ni, brass were studied (preheated to 200—300C); bombardment by ions of air, He, A with energies of 5—10 kev; primary-beam angle, 6—16°. It was found that the minimum energy spread of the secondary electrons occurred with the lowest (5 kev) primary energy and the greatest (16°) grazing angle. Orig. art. has: 5 figures.

SUB CODE: 09 / SUBM DATE: 08Jun63 / ORIG REF: 001 / OTH REF: 004

Card 1/1 BLG UDC: 537.533.35

L 00073-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6029900 SOURCE CODE: UR/0413/66/000/015/0063/0064

INVENTOR: Kushnir, Yu. M., Rozenfel'd, L. B.; Der-Shvartu, G. V.; Kogan, N. B. 36 13

ORG: none

TITLE: Microscope of the ion emission type. Class 21, No. 184366

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 63-64

TOPIC TAGS: microscope, field emission microscope, ion emission

ABSTRACT: The proposed microscope of the ion emission type contains an axisymmetric electrostatic optical system, a diaphragm, a device for separating ions of specific mass from the ion beam, an ion collector, such as the first dynode of a secondary electron multiplier, an amplifier, and a recording unit (see Fig. 1). To increase microscope resolution and to make possible the observation of the distribution of various chemical elements on the surface of the sample, a scanning system, synchronized with the control unit and admitting through the diaphragm an enlarged ion image for every element, is used in the microscope. For the same purpose, the device which

Card 1/2 UDC: 621.385.833

ACC NR: AT6029930

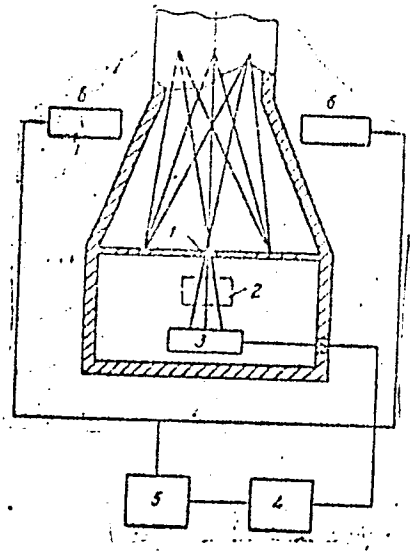


Fig. 1. Ion emission microscope

1 - Diaphragm; 2 - system for separating ions of specific cross from the ion beam; 3 - ion collector; 4 - amplifier; 5 - recording unit; 6 - scanning system.

separates the ions of specific mass from the ion beam is placed between the diaphragm and the ion collector. Orig. art. has: 1 figure. [JR]

SUB CODE: 20/ SUBM DATE: 25Sep64/

Card 2/2

KAGAN, N.I.

CA

18

Extraction of titanium and cobalt from wastes. N. I. Kagan.—U.S.S.R. 69,629, Nov. 30, 1947. Waste, such as is obtained in treating W-Ti-Co alloys, is fused with K or Na carbonate and KNO_3. The W forms a sol. tungstate, Ti forms K titanate and the Co forms cobaltic cobaltous oxide. The tungstate is leached out and the residue is treated with HCl. Co changes into its chloride and the Ti ppts. as $TiO(OH)_2$. The components are then sepd. in the usual manner. M. Hosch

KAGAN, N. I.

Consecutive pouring of parts in a single mold box. Lit.proizv. no.6:31 Je '55. (MLRA 8:8)
(Founding)

KAGAN, N. I.

Increasing the output of continuous furnace pipe welding plants.
Metallurg 7 no.11:24-26 N '62. (MIRA 15:10)

1. Zamestitel' nachal'nika tsekha pechnoy svarki trub Chelyabinskogo truboprokatnogo zavoda.

(Pipe mills)

FRIKKE, S.A., inzh.; KAGAN, N.I., inzh.

Mastering the procedure for producing gas pipes by continuous furnace welding. Stal' 22 no.10:929-931 O'62. (MIRA 15:10)

1. Ural'skiy nauchno-issledovatel'skiy trubnyy institut.
Chelyabinskiy truboprokatnyy zavod.
(Gas pipes—Welding)

TAYTS, N.Yu., doktor tekhn. nauk; KLEYNER, M.K., inzh.; ZAVALISHIN, Ye.K., inzh.; KALUGIN, Ya.P., inzh.; FALILEYEV, I.L., inzh.; KAGAN, N.I., inzh. [deceased]; Prinimali uchastiye: POPOV, V.N. inzh.; CHUYKOV, A.A., inzh.; MINUKHINA, L.N., inzh.; KHATSAREVICH, V.R., inzh.; TOLMACHEVA, I.A., inzh.; BAZHENOVA, V.N., inzh.

Technological and thermodynamic characteristics of strip heating for the continuous furnace welding of pipes. Stal' 24 no.8:746-750 Ag '64. (MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut, Ural'skiy nauchno-issledovatel'skiy trubnyy institut i Chelyabinskiy truboprokatnyy zavod.

KAGAN, N.L.

Case of ascariasis in children. Zdrav. Bel. 9 no.7:88 Jl '63
(MIRA 17:4)

1. Iz Gomel'skoy detskoy bol'nitsy (glavnyy vrach - S.V. Zaykova).

KAGAN, N.M.; FILIMONOV, L.N.

Spectrum analysis of nitrogen and oxygen in titanium. Zav.lab.23 no.2:185-187 '57. (MLRA 10:3)

1. Institut "Giprotsvetmetobrabotka".
(Nitrogen--Spectra) (Oxygen--Spectra) (Titanium--Analysis)

32-7-44/49

AUTHORS: Makulov, N.A., Kagan, N.M.

TITLE: The Industrial Control Quantometer for the Analysis of Production in the Steel Casting Industry
(Proizvodstvennyy kontrol'nyy kvantometer dl'ya analiza produktsii staleliteynykh zavodov)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 7, pp. 880 - 881 (USSR)

ABSTRACT: For the determination of the chemical composition of the products of English Steel Casting Plants a quantometer made by the firm of Arl is used. It can be used for the control and investigation of caboniferous and low-alloyed steels. The samples to analyzed are made in form of disks having a diameter of 45 mm and a height of 16 mm. As a counterelectrode a graphite rod with cone-shaped end is used. Annealing takes 5 seconds, the time of exposure is 20 seconds. These quantometers are widely in use in the English metallurgical industry. There are 2 tables.

Card 1/2

KAGAN, N.M.

66355
SOV/81-59-19-67721

5.5310

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 19, p 124 (USSR)

AUTHORS: Filimonov, L.N., Kagan, N.M.

TITLE: On the Spectral-Analytic Determination of Carbon and Hydrogen in Titanium

PERIODICAL: Fiz. sb. L'vovsk. un-t, 1958, Nr 4(9), pp 222 - 225

ABSTRACT: The possibility of determining 0.01 - 1% of C in titanium by the line 2296.89 A has been studied. The spectra are excited in the discharge of a high-voltage condensed spark from a Dietert generator with a Cu-electrode sharpened to a truncated cone with an area of 1 mm in diameter; the interelectrode gap is adjusted equal to 1.25 - 1.5 mm. Synthetic standards are employed made of briquetted and calcined mixtures of magnesium-thermal titanium and Ti carbide powders. Surface pollutions with C-containing substances are sources of errors. Preliminary burning eliminates the pollutions in an O_2 atmosphere or in mixtures of other gases with O_2, but in pure He and N_2 even longlasting burning does not eliminate the surface pollutions. The absolute sensitivity of C determination is less in an O_2 medium and increases on adding N_2 or He to it;

Card 1/2

Gosudarstvennyy N I I IN-TA obrabotki tsvetnykh metallov
"Giprotsvetmetobrabotka."

On the Spectral-Analytic Determination of Carbon and Hydrogen in Titanium

at an addition of $>$ 50% the sensitivity does not increase and the intensity of the spectrum decreases. In the analysis in an air medium the calibration graph starts bending at C concentrations of $<$ 0.1% in the sample, but in O_2 and in mixtures of O_2 with a three-fold volume of N_2 or He the linearity of the graph is maintained up to 0.05%. H in titanium is determined by the line 6562.85 A at the excitation of the spectra by a pulse discharge with a capacitance of 1,000 μ farad, an inductance of 0.05 μ henry and a spark gap of 0.3 mm. The analysis is carried out on a device with a reverse linear dispersion of 500 A/mm in the region of the H line which is resolved from the line C 6578.03 A at a slit width of 0.005 mm. The spectra of the samples of the iodide, calcium-thermal and magnesium-thermal titanium with equal H contents ($\sim$ 0.012%) show a strong change in the intensity of the background of the spectrum (up to 4 times), which increases with the increasing content of the admixtures. Considerations on the manifestation of the effects of third elements on the analysis results are expressed.

N. Sventitskiy

Card 2/2

88243

S/195/60/001/003/007/0'3
B013/B058

18.1153

AUTHORS: Lyubarskiy, G. D., Ivanovskaya, L. N., Isayeva, G. G., Layner, D. I., Kagan, F. M.

TITLE: Study of the Catalytic Activity of Nickel Catalysts. II. Effect of the Admixtures of Transition Metals

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 3, pp. 385 - 392

TEXT: In this paper the authors studied the effect of admixtures of transition metals to the nickel on its catalytic activity. It was the aim of the paper to clarify the effect of these admixtures to the alloy of nickel with aluminum or silicon on the specific activity of the skeleton catalysts obtained after the leaching out of aluminum. Series of nickel-aluminum alloys were prepared with various amounts of metal admixtures (titanium, chromium, vanadium, molybdenum, iron, copper, and cobalt) and with the same aluminum content (50% by weight). These ternary alloys were crushed, leached out, and tested according to the method described in Ref. 1. The activity of the samples was determined in a

Card 1/4

continuous-flow circulation apparatus by means of benzene hydrogenation. The experiments were conducted at temperatures of 27°, 32°, and 38°C and a hydrogen [illegible] of 7 l/h per 1 cm^3 catalyst. The initial benzene concentration was 1.5 mmole per 1 l benzene-hydrogen-vapor mixture. The surface was determined by means of the BET method after the adsorption of nitrogen. The studies showed that the addition of chromium, titanium, molybdenum and vanadium affects the activity of nickel aluminum catalysts only slightly. The thermal stability of the samples is sufficiently high. The catalytic activity of samples with chromium- and titanium content is even increased through treatment with hydrogen at 200°C. The samples with molybdenum content are, however, less stable when heated and show reduced activity already at 150°C. The specific activity of nickel remains practically unchanged with an addition of up to 20 to 30 at% metal and on an average amounts to $1.7 \cdot 10^{-4}$ mol/h·m^2 at 38°C. The activity related to 1 g catalyst shows a slight increase (by 15 to 20%) for smaller amounts of admixtures (up to 5 to 7 at%). The observed steadiness of the specific

Card 2/4

activity of the catalysts studied can be explained by the fact that the metal admixtures mentioned form solid phases with nickel only to a limited extent. A study of the changes of the nickel-crystal parameter showed that through the addition of 5 at% titanium, 6 at% aluminum, 8 at% vanadium or 10 at% chromium, the lattice is only changed by 0.01 Å. In some cases (chromium, titanium), these admixtures cause an improvement of the properties important for the practice, such as stability, mechanical strength of the granules etc. The high activity of the alloyed catalysts studied permits to carry out the hydrogenation of benzene at temperatures close to room temperature. It was shown that with respect to their activity, the skeleton catalysts surpass other known nickel catalysts which were obtained through reduction of nickel oxides or salts. The energy of activation, calculated from the temperature coefficients, remains almost constant and amounts to about 12 ± 1 kcal/mol, independent of the composition. The constancy of the energy of activation, observed in all catalysts studied, points towards a possibly equal mechanism of this reaction. On the addition of cobalt and iron, similar results were ob-

Card 3/4

tained as for other metals. There are 5 figures, 6 tables, and 11 references: 5 Soviet, 4 US, 1 Belgian, 3 British, 1 French, and 1 German.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: December 26, 1959

S/195/60/001/004/010/015
B017/B055

AUTHORS: Layner, D. I., Kagan, N. M., Lyubarskiy, G. D., Isayeva, G. G.

TITLE: The Effect of Copper on the Catalytic Properties of a Skeleton Nickel Catalyst

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 4, pp. 576-582

TEXT: The authors investigated the decrease of catalytic activity, magnetic susceptibility, and specific surface produced by dissolving out aluminum from catalysts with increased copper content formed from Al-Ni-Cu alloys. The dependence of magnetic susceptibility and activity of skeleton catalysts (Cu + Ni) on the copper content is shown graphically in Fig. 1. Fig. 2 represents the phase diagram of Al-Ni-Cu alloys according to Köster (Ref. 9). The finely ground Al-Ni-Cu alloys were leached out with 20% NaOH at 98-100°C. The phase composition of leached alloys was examined radiographically. The relative results appear in Fig. 3. Catalytic activity was determined by hydrogenation of benzene and the specific surface by the BET method. The data obtained are tabulated. The activation energy of the catalysts in hydrogenation of benzene was

Card 1/2

The Effect of Copper on the Catalytic Properties of a Skeleton Nickel Catalyst

S/195/60/001/004/010/015
B017/B055

fairly constant at copper contents of 0 to 15 % by weight. The rapid decrease in magnetic susceptibility and catalytic activity observed in the case of leached alloys with increased copper content is due to a decrease in the content of metallic nickel, which forms only from the ε phase the content of which, however, rapidly decreases at 20% Cu. There are 5 figures, 1 table, and 10 references: 1 Soviet, 3 US, 3 British, and 3 German.

ASSOCIATION: Institut Giprotsvetmetobrabotka (State Design and Planning Scientific Research Institute for Working of Nonferrous Metals). Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: February 20, 1960

Card 2/2

LAYNER, D.I.; KAGAN, N.M.

Phase composition of skeleton nickel catalysts. Trudy Giprotsvetmetobrabotka no.20:104-116 '61. (MIRA 15:2)
(Catalysts, Nickel--Testing) (Nickel--Metallography)

FREYDLIN, L.Kh.; ZHUKOVA, I.F.; ZIMINOVA, N.I.; LAYNER, D.I.; KAGAN, N.M.

Deactivation of sketetal nickel catalyst by water vapor and enhancement of its stability by means of promoters. Kin. i kat. 2 no.1:112-117 Ja-F '61. (MIRA 14:3)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR. Institut giprotsvetmetobrabotka.
(Catalysts, Nickel)

LAYNER, D.I.; KAGAN, N.M.

Phase constitution of catalysts obtained by the leaching of Al-Ni alloys. Fiz. met. i metalloved 11 no.6:834-842 Je '61. (MIRA 14:6)

1. Giprotsvetmetobrabotka.
(Aluminum-nickel alloys--Metallography)
(Leaching)

FREYDLIN, L.Kh.; BORISOVA, N.V.; GVINTER, L.I.; [illegible]

Investigating the effect of cadmium on the activity and selectivity of nickel-zinc catalysts in the hydrogenation of hydrocarbons. Neftekhimia 4 no.4:547-551 Jl-Ag '64. (MIRA 17:10)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i Gosudarstvennyy nauchno-issledovatel'skiy institut splavov i obrabotki tsvetnykh metallov.

ACCESSION NR: AP4044553 S/0204/64/004/004/0547/0551

AUTHOR: Freydlin, L. Kh., Borunova, N. V., Gvinter, L. I., Layner, D. I., Kagan, N.M.

TITLE: Investigation of the effect of cadmium on the activity and selectivity of nickel-zinc catalysts during hydrogenation of hydrocarbons

SOURCE: Neftekhimiya, v. 4, no. 4, 1964, 547-551

TOPIC TAGS: cadmium, nickel, zinc, nickel zinc catalyst, hydrogenation, catalyst selectivity, hydrocarbon, benzene, styrene, cyclohexene, octene, gas chromatography, catalytic hydrogenation

ABSTRACT: The effect of metallic cadmium on the activity and selectivity of nickel over zinc oxide catalysts during the hydrogenation of hydrocarbons, such as hepten -3 (b.p. 95.8-96.1C, n_D^{20} = 1.4033), a mixture of octenes (b.p. 123-125C, n_D^{20} = 1.4140), cyclohexene (b.p. 83C, n_D^{20} = 1.4450), styrene (b.p. 52-53 C/28mm Hg, n_D^{20} = 1.5462) and benzene (b. p. 80.1C, n_D^{20} = 1.5017), was investigated under flow conditions. After cooling to -5C,

Card 1/3

ACCESSION NR: AP4044553

the products were analyzed by gas chromatography. It was found that the relative amounts of cadmium necessary for deactivating the catalyst in the hydrogenation of benzene, cyclohexene and the ethyl bond of styrene were 0.2, 25 and 500% by weight. The probable mechanism of the action of cadmium at different temperatures was studied and discussed. It was established that a variation in the amount of Cd permits the selective hydrogenation of olefins in the presence of benzene or of styrene mited with cyclohexene. The change in the catalytic properties of nickel due to the addition of Cd is due to the change in the composition and crystal structure of the surface layer of the catalyst. Under conditions close to those of the preparation of Ni-ZnO-Cd, cadmium interacts with nickel and forms an intermetallic compound. X-ray analysis and comparison of the interplanar spacings obtained previously showed that the reaction products of mixtures containing up to 70% Cd consist of nickel crystals and β-phase crystals (Cd_1, Ni_1). For products containing only 30% nickel, there was only one line of β-phase with a further increase in the Cd content in the mixture, lines of other intermetallic compounds, apparently with a higher cadmium content (β-phase), appear. On increasing the time of reaction of the catalysts, the loss in Cd increases. New active surface sites on the Ni catalyst are set free and the activity

Card 2/3

Card 3/3

HAGA, [illegible], Cand [illegible] Sci—([illegible]) "[illegible] of the [illegible] Lymphatic [illegible] in newborn infants, [illegible] children, and [illegible] labor [illegible]. ([illegible])." Perm', [illegible].
1 p (Perm' [illegible] Med Inst), [illegible] copies ([illegible],106)

ZHENDRINSKIY, Ivan Pavlovich; KAGAN, Naum Pavlovich

[Leucorrhea] Beli. Izd.3. Moskva, Medgiz, 1958. 21 p.
(LEUCORRHEA) (MIRA 13:8)

KAGAN, N.P., glavnyy vrach

Publicize the cause of quietness in living. Med. sestra 19 no.7: Jl '60. (MIRA 13:8)

1. Iz Doma sanitarnogo prosveshcheniya Kuybyshevskogo rayona Moskvy.
(QUIETUDE)

On Methods of Determining the Mechanization Level in Machine Building Industry

both the mechanical $Q_м$ and manual $Q_р$ methods, i.e.:

$$M_{nn} = \frac{Q_м}{Q_0} \cdot 100 = \frac{Q_м}{Q_м + Q_р} \cdot 100 \qquad \text{(Formula 2)}$$

It is proved by calculations that the practice is wrong, as well as factors which have been suggested by L.Ya. Berri and K.I. Klimenko (Ref. 3), and it is mentioned that Institut elektrosvarki im. Ye.O. Patona AN UKRSSR (Electric Welding Institute im. Ye.O. Paton of the AS UKrSSR) has developed productivity coefficients for different electric machine welding by comparison with manual arc welding, which proves that such coefficients can also be developed at machine building works. The authors suggest that the work of workers at machines be separated from manual operations and a "coefficient of machine time" "$K_м$" be used. This coefficient must be established for every type and pattern of machines and it will depend on the auxiliary equipment and the organization of the production process. The idea is explained on a practical example of a molding machine (Table 1). Such coefficients would help to calculate easily the degree of mechanization at every work place and subsequently the mechanization degree of the production process M_m as a whole, using the formula (5):

S/128/60/000/011/003/007
A033/A133

AUTHOR: Kagan, N. Ya.

TITLE: Main trends in the mechanization and automation of foundry shops with small-batch or piece production

PERIODICAL: Liteynoye proizvodstvo, no. 11, 1960, 9 - 17

TEXT: In his article the author presents a general survey on the degree of mechanization and automation of foundry shops, particularly those of heavy machine plants which at present produce more than 40% of steel castings and 20% of cast iron of the total casting output of the USSR. The Vsesoyuznyy proyektno-tekhnologicheskiy institut (All-Union Planning and Technological Institute) has carried out an analysis of the foundry production of more than 100 foundries of heavy machinery plants with mainly small-batch and piece production, and, together with the Uralmashzavod, basic technological and organization measures have been worked out, which have been approved by the Sverdlovsk Sovnarkhoz, the Mosoblsovnarkhoz and the Department of Heavy Machine Building of the Gosplan USSR. Referring to the above mentioned work, the author points out that a prerequisite for the increase of the level of mechanization and automation of molding, core-making and

Card 1/4

Main trends in the mechanization and automation ...

shaking-out operations is the mechanization of molding sand preparation, including the standardization of molding sand installations of 10 - 20 - 40 - 80 m^3/h capacity. Moreover, the foundry shops should be relieved from the preparation and processing of binders, pasts, paints and other auxiliary molding materials as well as the treatment and preparation of molding sands, clays and bentonites. These operations should be performed at centralized enterprises on the Rayon level. The author states that the degree of mechanization of molding operations at heavy machinery plants is still rather low and, on the average, amounts only to 7.8% in steel foundries and 8.2% in cast iron foundries. The molding machines being employed have a low machine time coefficient (8 - 10%) and an insufficient productivity (0.5 - 6 items per h). The author indicates a number of other deficiencies which he considers a great obstacle on the path to overall mechanization and automation of production processes in foundry shops with small-batch and piece production. To eliminate these deficiencies, a number of new technological measures have been developed which, in the first place, exclude the influence of the extent of the casting series on the volume of overall mechanization and automation of the main technological processes in foundry practice. The author then analyzes the main trend in the overall mechanization and automation of molding, pouring and shaking-out operations with the aid of an example of a model plant, this plant being designed to serve as a pilot model for the reconstruction of steel casting

Card 2/4

capacity of 22,000 tons/year. Illustrations show the automatic measuring hopper installation, the cope and drag tilting mechanisms, the automatic shaking-out station. Further reference is made to the small-batch and piece production of castings in the range of 3 - 150 tons, castings from 50 tons on being produced in concrete caissons with the aid of mechanized equipment. It is emphasized that, the percentage of labor consumption of cleaning operations being in the range of 15.5 - 13.7% of the total labor consumption of foundry production, a mechanization and automation of these cleaning operations at heavy machinery plants will result in a considerable increase in productivity. The basic equipment for the mechanization of cleaning operations are sandblasting and shotblasting chambers and cleaning drums. Moreover, the author points out that some 450 conveyer lines will be needed by the heavy machinery foundry shops for the mechanization and automation of loading, unloading and processing operations. There are 14 figures.

Card 4/4

KAGAN, N.Ya.; SHENKER, B.Z.; Prinimali uchastiye: FISHKIN, Ye.L., inzh.; REVZIN, A.Z., inzh.; ROZINKINA, L.N., inzh.

Selection of pattern equipment material in individual and small batch production. Lit. proizv. no.12:1-4 D '64.
(MIRA 18:3)

NEMTSOV, I.S.; KAGAN, I.A.

Interplant schools of advanced practices. Stroi. mat. 10 no.6:32-33 Je '64. (MIRA 17:10)

1. Nachal'nik otdela rasprostraneniya peredovogo opyta i tekhnicheskoy informatsii Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley Ministerstva stroitel'stva RSFSR (for Nemtsov). 2. Zamestitel' nachal'nika otdela rasprostraneniya peredovogo opyta i tekhnicheskoy informatsii Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley Ministerstva stroitel'stva RSFSR (for Kagan).